

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by:
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General Information

Name:	Alcatel Magnet Wire, Inc.
Address:	2615 East Highway 146, LaGrange, KY 40031
Date application received:	November 27, 1996
SIC/Source description:	3357; magnet wire manufacturing
AFS (9-digit) Plant ID:	21-185-00004
EIS #:	104-3100-0004
Application log number:	E803
Permit number:	V-98-013

Application Type/Permit Activity

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
___Administrative	<input checked="" type="checkbox"/> Title V
___Minor	<input type="checkbox"/> Synthetic minor
___Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

Compliance Summary

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

Applicable Requirements list

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other

Miscellaneous

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Class I area impacts
- ☐ Area is non-attainment for:

Emissions Summary

Pollutant	Actual (tpy)	Potential (tpy)
PM	0.863	1.396
SO ₂	0.066	0.093
NO _x	11.080	15.521
CO	2.327	3.260
VOC	143.456	143.456
LEAD	0	0
HAP \geq 10 tpy (by CAS)		
xylene (1330-20-7)	20.262	20.262
phenol (108-95-2)	92.129	92.129

Source Process Description:

This source manufactures enamel coated magnet wire for the electronics industry. The company utilizes copper rods and uses drawing machines to pull the rods through dies into different diameter wires. This process weakens the copper wire which then is strengthened again by the use of annealing ovens which relieves the internal stress created by the drawing process and restores the wires' original strength. The desired thickness of enamel coating is applied by the use of different size dies through which the coated copper wire passes. The enamel is then cured using electric and natural gas-fired ovens.

Emission and Operating Caps description:

This source is major for VOC's and HAP's. Each of the HAP's, phenol and xylene, will be emitted in amounts greater than ten tons per year as a single HAP and greater than twenty-five tons per year as a combination of HAP's. These are above the major source thresholds and therefore, the source is major with regard to the HAP's. There will not be any PM emissions from the coatings as the enamel is applied by a flow coating application process. VOC emissions are released from the solvent component of the enamel. This amount is greater than 100 tons per year and, again, this classifies the source as a major source. Other amounts of pollutants listed in the table above come from the combustion of natural gas. Regulation 401 KAR 59:190, New insulation of wire magnet operations applies to the VOC's from the enameling machines and requires VOC emissions to be controlled with an overall efficiency of 85%. This will be achieved by catalytic and thermal incineration at the enameling machines.

Operational Flexibility:

Not applicable

Pollution Prevention:

Not applicable